



wall with a drainage hole therein, said shells being sized and shaped to receive a frame in which said tooling from said vertical press can be mounted, said method comprising mounting said tooling in said frame plate, mounting said frame on said flange of one of said shells, mounting each shell of said steam chest in a horizontal press with the side wall containing said drainage hole extending downward or in a vertical press with the edge wall containing said drainage hole extending downward, operating said press to close said steam chest with said frame sandwiched between said flanges.

7. A method as claimed in Claim 6 including the steps of installing a mold plate into the frame, filling the mold plate with expandable foam beads using a fill gun or fill guns, circulating steam through the steam chest to cause the foam beads to expand and gel together, subsequently circulating cooling water through the steam chest, removing the steam chest from the press and removing the mold plate from the steam chest.

8. A method of using a steam chest in both a vertical press and a horizontal press using a steam chest having two shells, each shell having an opening along one side thereof with a flange surrounding said opening, there being two flanges, one for each shell, a frame having a periphery that is sized and shaped to correspond to said flanges, said frame being sandwiched between said flanges when the chest is assembled with the shells defining a cavity therein, each shell having one side wall and at least one edge wall extending normal to said side wall, there being two side walls and at least two edge walls, at least one side wall and one edge wall having drainage holes therein with removable plugs, said method comprising mounting tooling within said frame, mounting said frame between the flanges of said two shells, mounting the steam chest in a vertical press with an edge wall containing the drainage hole extending downward or mounting said steam chest in a horizontal press with the side wall containing the drainage hole extending downward, operating the press to open or close the steam chest.

9. A method as claimed in Claim 8 including the steps of mounting a mold plate within said frame, filling the mold plate with foam beads using a fill gun or fill guns, circulating steam through the steam chest to expand the beads and cause them to gel, subsequently circulating cooling water through the steam chest.

10. A method as claimed in Claim 9 including the steps of inserting a frame with two sections into one shell of the steam chest, each section containing a mold plate, and filling each mold plate with foam beads using fill guns.

11. A method of manufacturing foam prototypes of various shapes and sizes using the same steam chest said steam chest having two shells that together enclose a cavity, said chest being able to accept tooling of various shapes and sizes within a specified range, said method comprising choosing a frame having a section or sections mounting the tooling in a section of said frame, said frame being sized to fit within the steam chest, installing the frame against a flange of one shell of the steam chest, mounting the steam chest in a horizontal or vertical press so that the operation of the press opens and closes the steam chest with the frame in between said two shells, filling the tooling with foam beads, heating the tooling by introducing steam into the steam chest to expand and fuse the beads, subsequently cooling the steam chest, retrieving the foam prototype formed in the tooling, repeating the method for tooling of a different size and shape by choosing a different frame while using the steam chest.